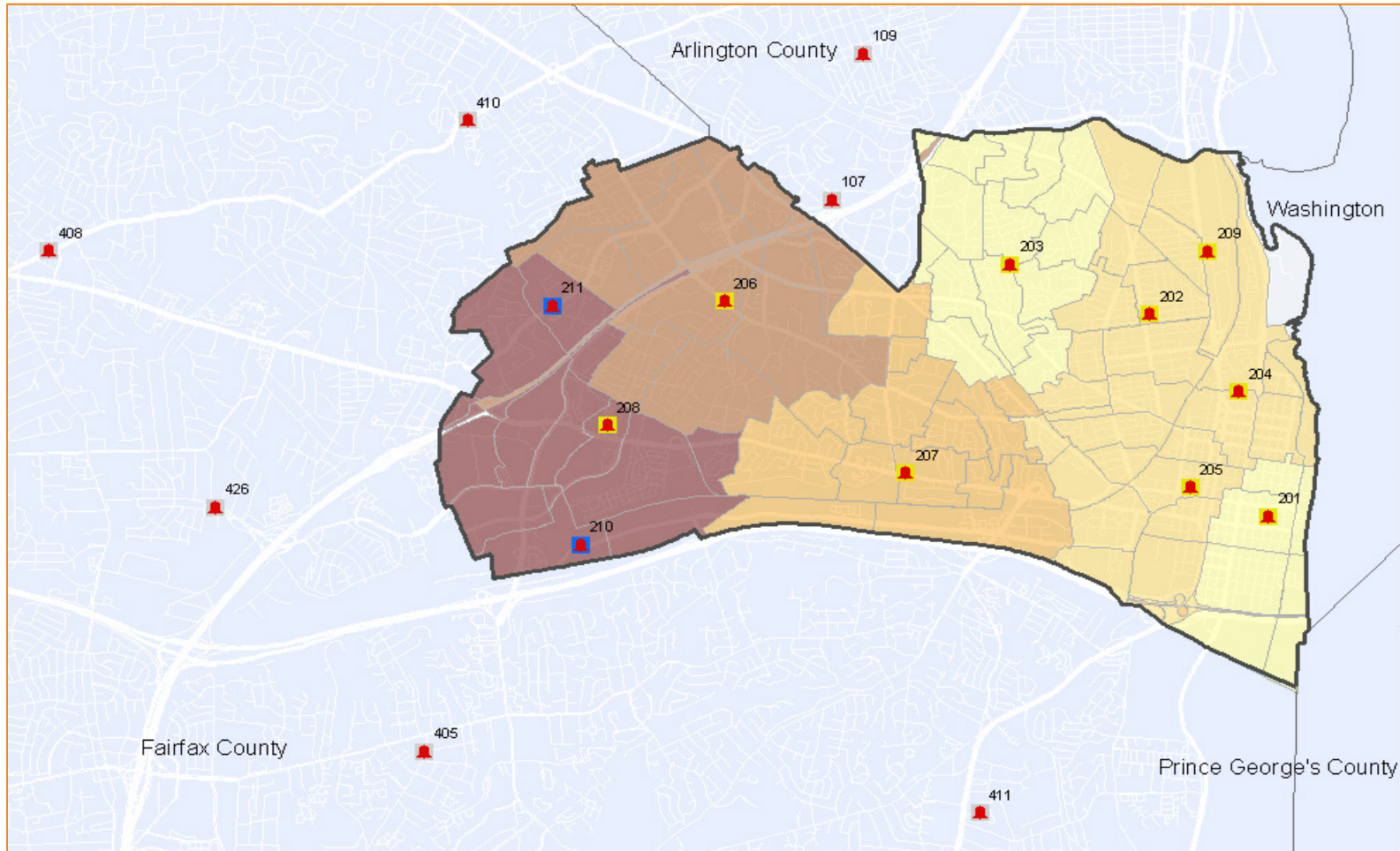


# Alexandria Fire Department Fire-Rescue Station 211

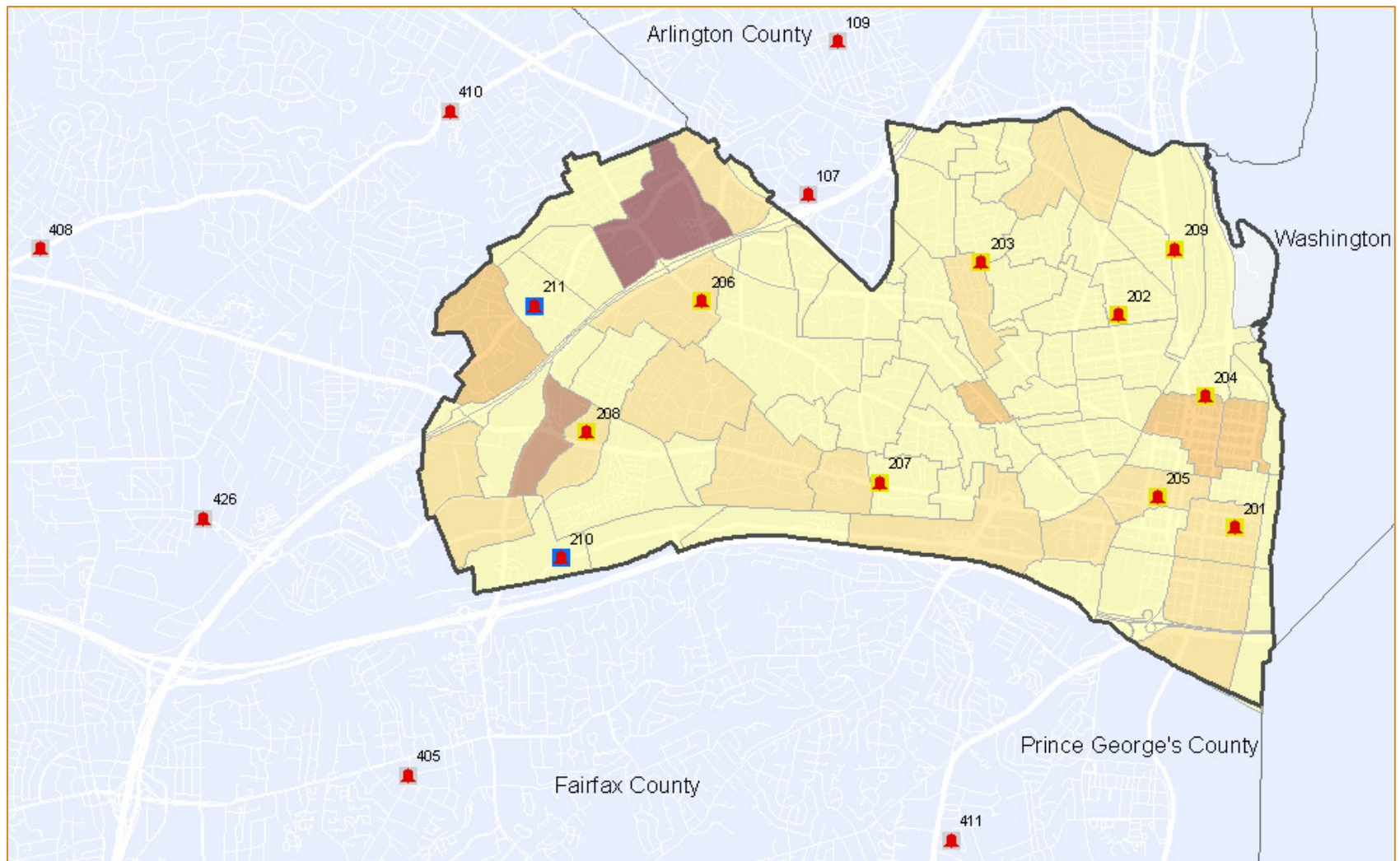
City West End  
Beauregard-  
Seminary Area

# Background

- City Operates 9 Fire Stations
  - Oldest Built in 1921; Newest in 2009
  - 7 Stations Situated in East End of Town
  - 2 West End Stations:
    - Busiest in City
    - Automatic Aid Supplement from Fairfax & Arlington
    - New Station 210 (Eisenhower Ave) Opening in 2013
- City Building Stock a Challenge
  - Historic to New
  - Residential, Commercial, Office, Industrial
  - Single Family, Garden Apartment, High Rise, Town Home
  - With and Without Sprinklers
- Call Volume Increasing
  - Nearly 19,000 calls Annually and Growing
  - Density--Buildings, Traffic, People--Drives Demand



**Call Volume by Station Area**  
*Current Situation (July 2011)*



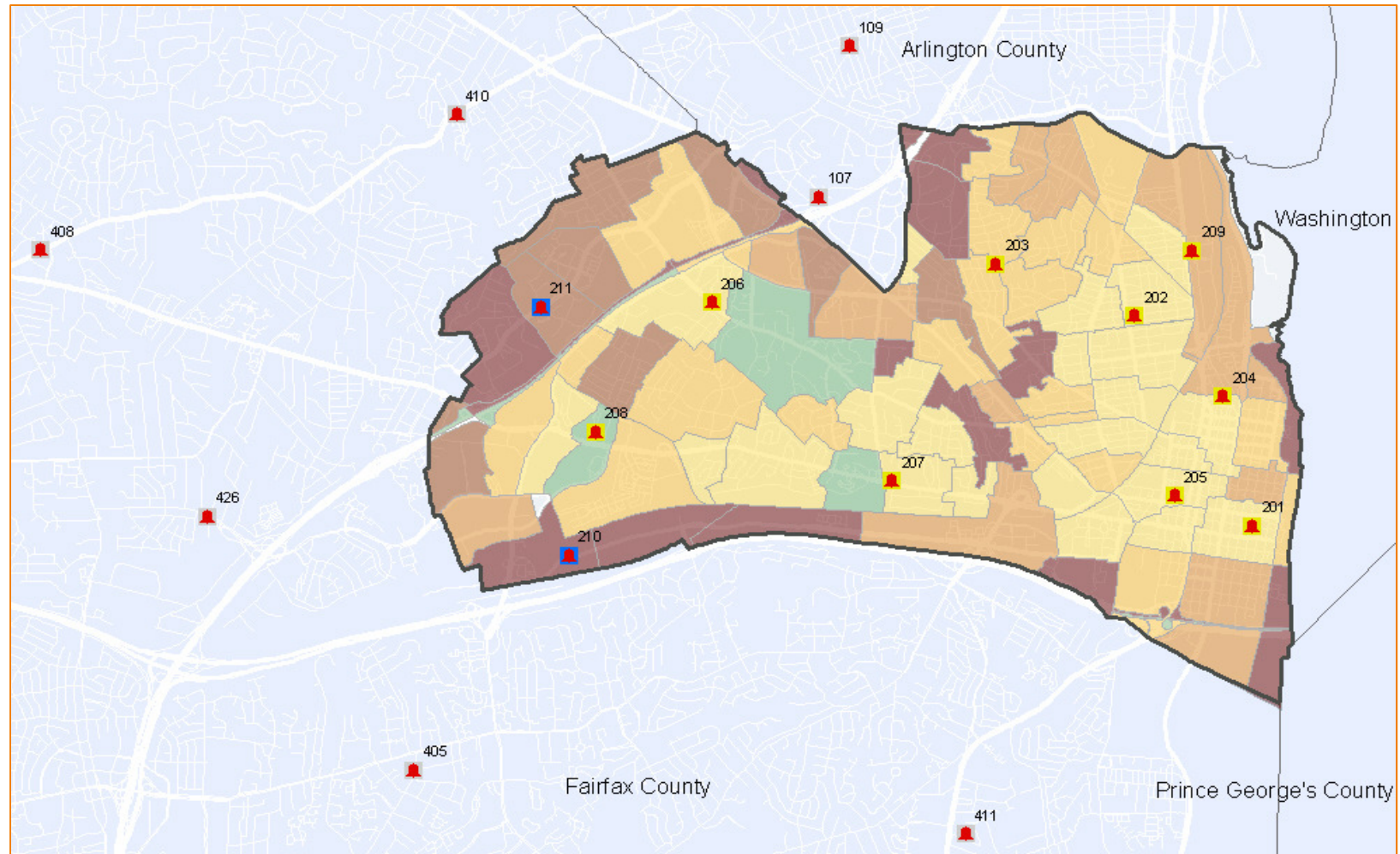
Call Volume by Fire Box



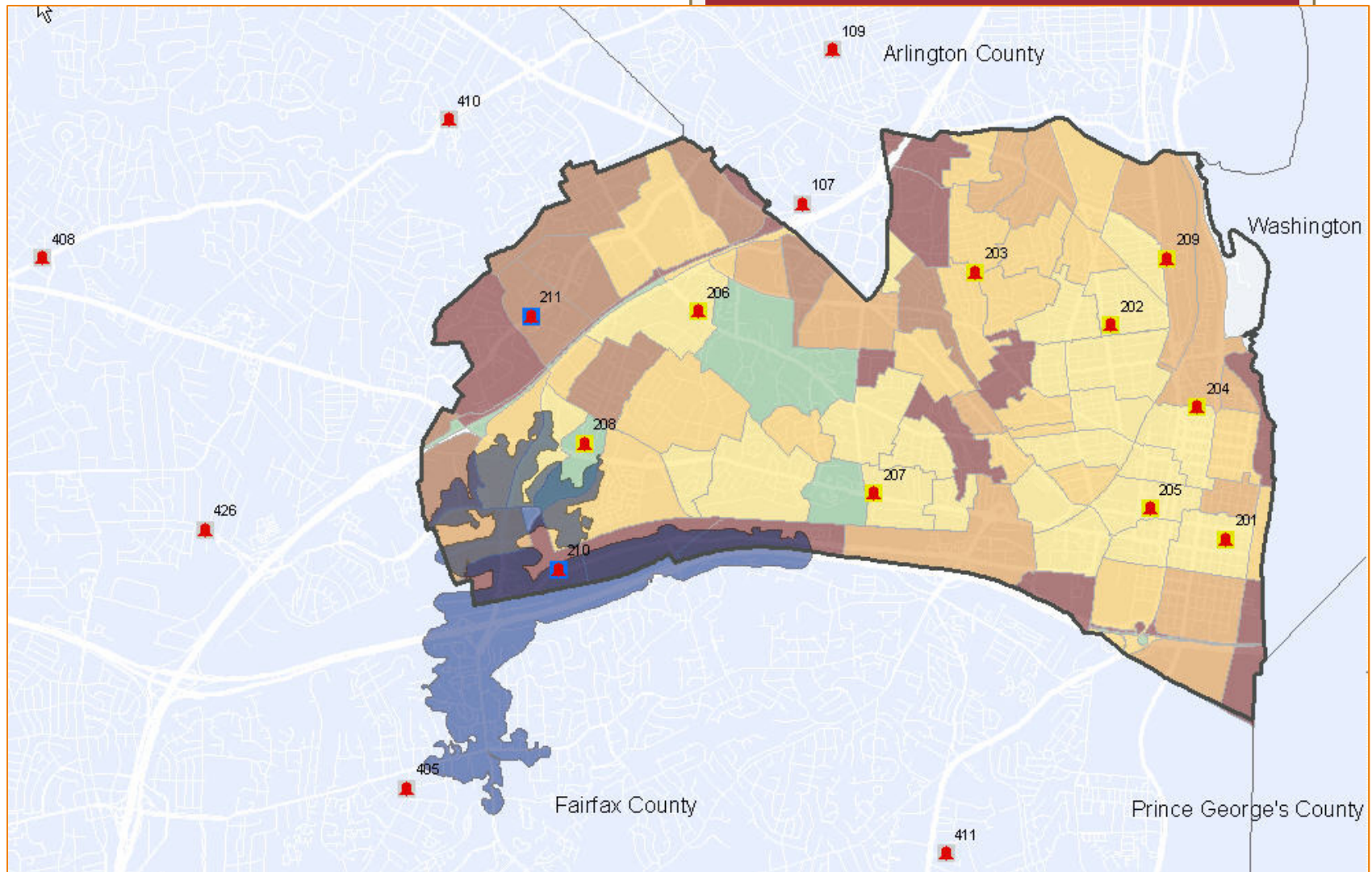
# West-End Response Times

- Department Adheres to Standard Metrics for Response Times
  - Brain Death can Occur within 4-6 Minutes of a Heart Attack
  - After 1 Minute, a Fire Exponentially Grows Bigger and Spreads Faster
- Response Time Components for 90% of Calls

Call Processing in Dispatch	1.0 Min.
Turn-Out Time in Station	1.0 Min.
Travel Time from Station to Incident	<u>4.0 Min.</u>
Subtotal, Current Times	6.0 Min.
<i>Post-BRAC Add-On Times</i>	<u>+11.0 - +12.0 Min</u>
Total Time Range Post-BRAC	17.0 – 18.0 Min.



Percent (%) of Emergency Incidents with Response Time within 5.5 Minutes. *Current Status (July 2011)*



Percent (%) of Emergency Incidents with Response Time within 5.5 Minutes. (Expanded Coverage with an Operational Station 210 (Eisenhower Ave))

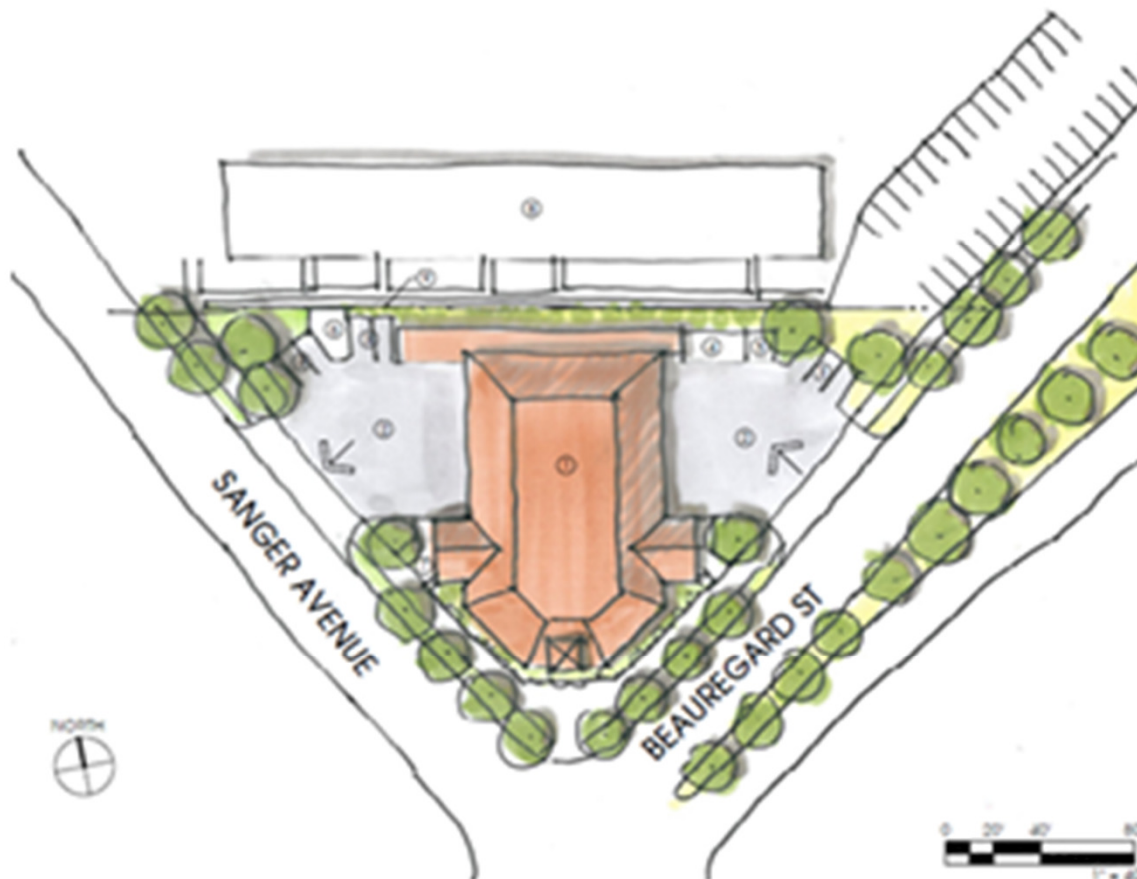
## Enhance Response Times in the West-End

- Propose New Station 211
  - Optimal Location: Beauregard & Sanger
    - Cover Entire West End
    - Enhance Response Times
  - Four-Bay Station:

• Engine	• Living Quarters
• Ladder Truck	• Offices
• Medic Unit	• Work & Storage Areas
• Command Vehicles	• Community Room



## Fire Station 211: Preliminary Concept Design



### Fire Station # 211:

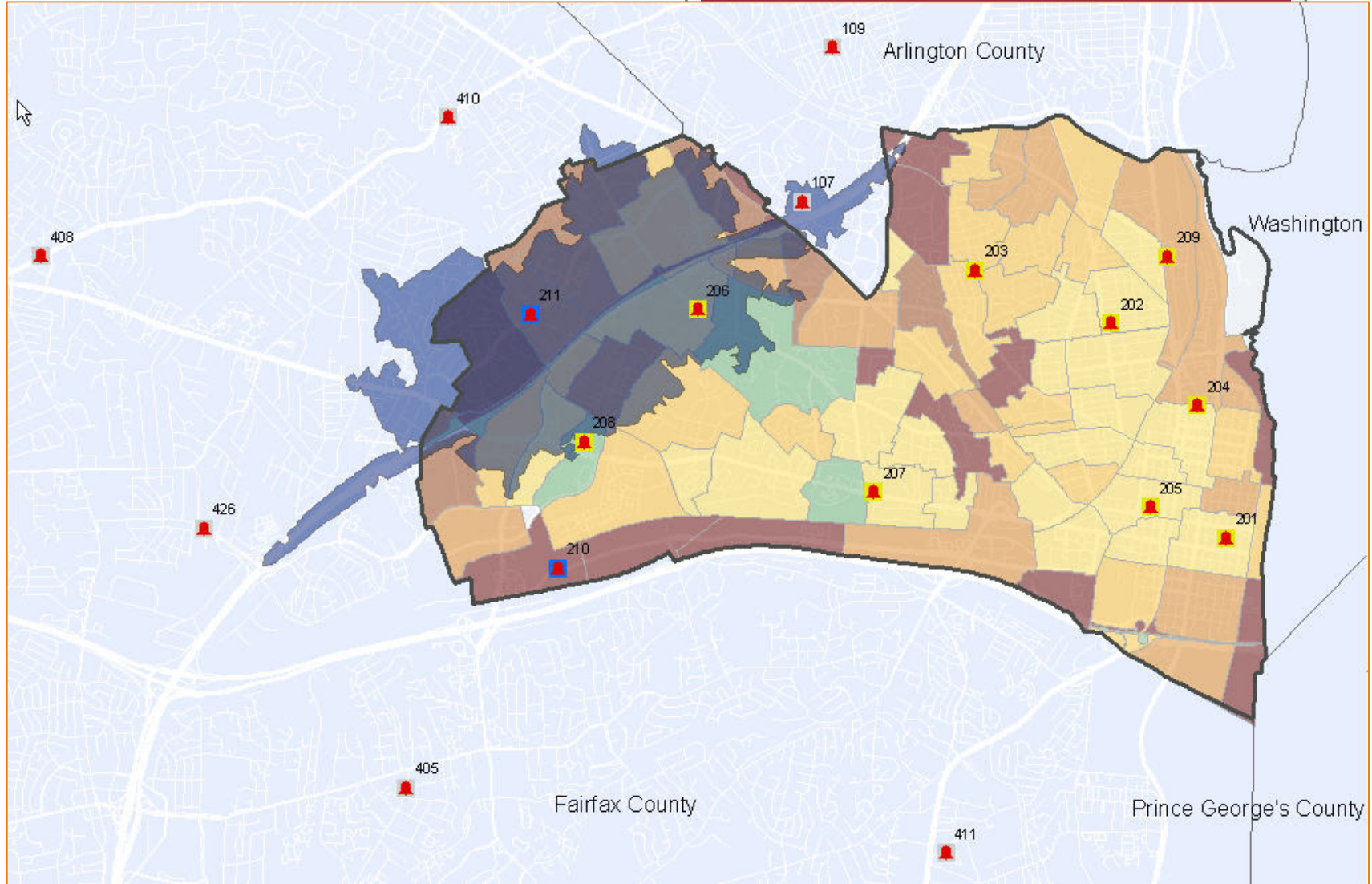
- Building area – 18,752 sq. ft. (19,608 mezzanine storage area)
- Two-story structure
- 4 Bays
- 18 Bunks
- Community Room – 473 sq. ft.
- 8 parking spaces onsite / additional parking to be located east of existing apartment building

## Fire Station 211: Preliminary Concept Design



### Site Constraints:

- Currently located in flood hazard area in Beauregard Study Area
- Currently in close proximity to flood dam inundation area
- Existing buildings will remain on the site through the last phase of JBG proposed development
- Future Transitway will run along Beauregard constraining right of way expansion



Percent (%) of Emergency Incidents with Response Time within 5.5 Minutes. *(Expanded Coverage with an Operational Station 211 (Beauregard & Sanger))*

# Automatic Aid to the City

- Automatic Aid Agreements among Alexandria, Arlington, Fairfax.
- Most Incidents Require Automatic Aid.
  - Example: First Alarm Structural Fire per NOVA Protocols:

- 4 Engines

- 1 Medic Unit

- 1 Medic Supervisor

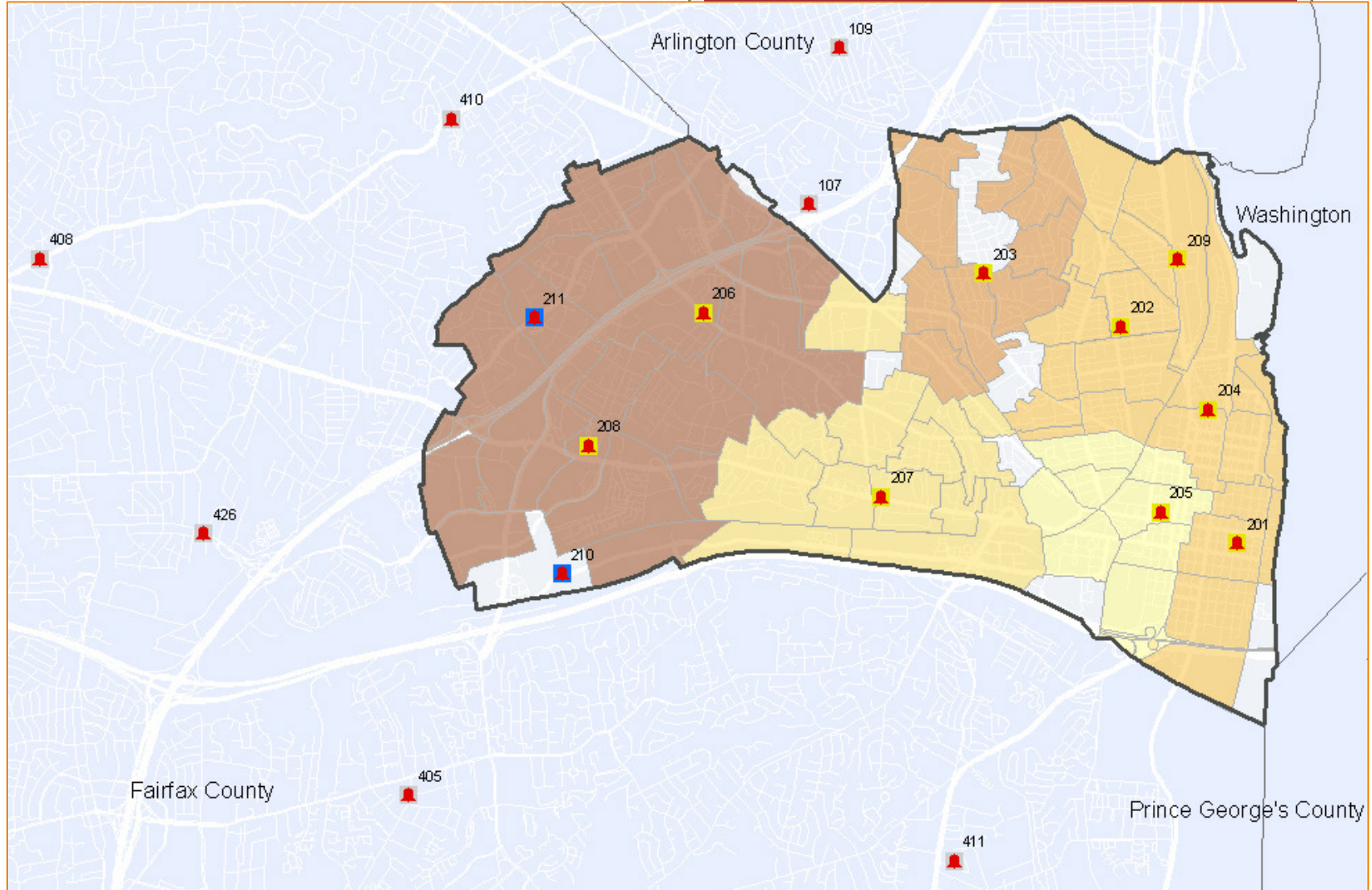
- 2 Trucks

- 2 Battalion Chiefs

- 1 Safety Officer

- Takes 4 of 8 City Engines and 2 of 3 City Trucks





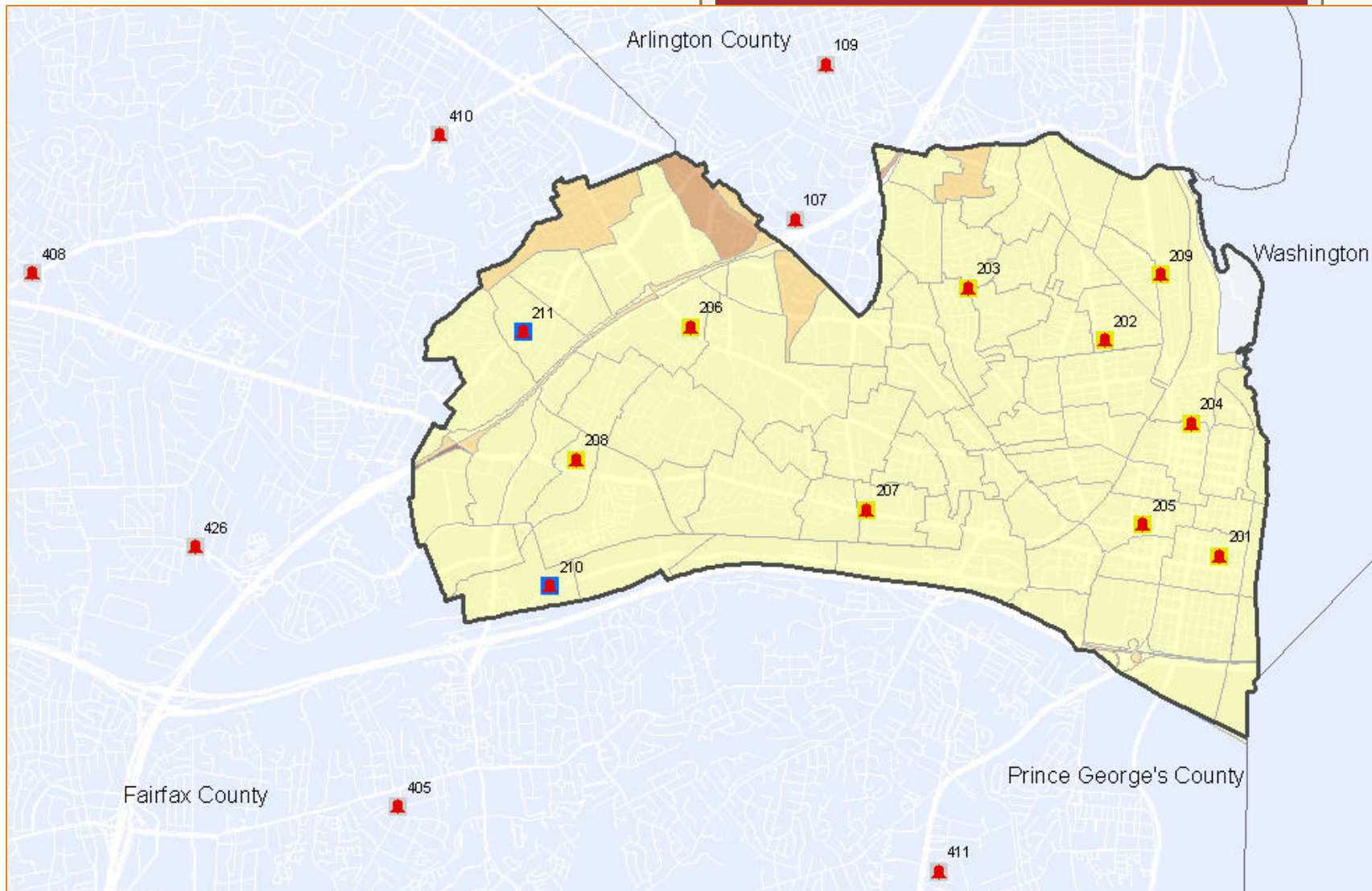
Percent (%) of Full Alarm Incidents that  
Include Aid Received by Fire Station Area

# Reliance on Automatic Aid

- All Areas of City Receive Automatic Aid Services

Auto. Aid Station	No. of Calls into City	City Calls/Total Calls
Arl. 107. Fairlington	789	51%
Arl. 109. Walter Reed	125	6%
FF. 405. Franconia	119	N/A
FF. 408. Annandale	6	0%
FF. 410. Bailey's Crossroads	190	6%
FF. 411. Penn Daw	250	N/A

- West End Heavily Reliant upon Assistance from Arlington and Fairfax Counties, even for "Routine" Incidents



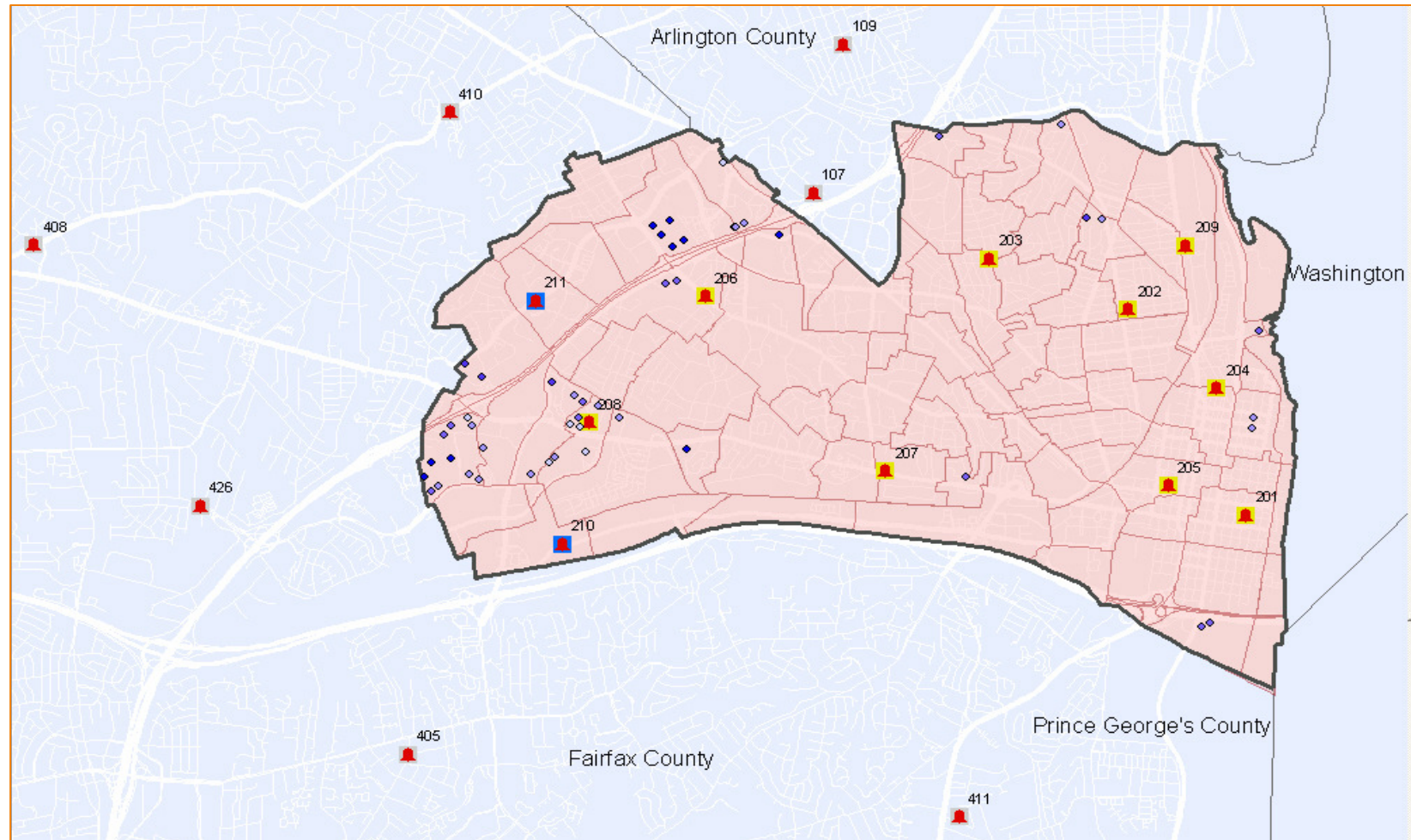
Percent (%) of Incidents with 1<sup>st</sup> Arriving Unit  
from Other Jurisdiction

## Challenge: High Rises w/o Sprinklers

- 48 High-Rise Buildings without Sprinklers
- Larger High Rises Contain +450 Units
- Ladder Trucks Reach to Floors 7 or 8
  - Means Firefighters Must Walk Up Stairs...
  - Carrying 160 lbs. of Equipment...
  - And Rely on 3-Person Minimum Staffing on Apparatus.\*
  - When It Doesn't Go Right:
    - 2007. Edsall Rd. High Rise Fire. 6 Firefighters Hospitalized
- BRAC Makes it Harder
  - Traffic Congestion
  - Non-Standard Responses Requiring More Department Resources

*\*4-Person Minimum Staffing Approved for Four Engine Companies in  
FY 2012 using Federal SAFER Grant Funding from FEMA*



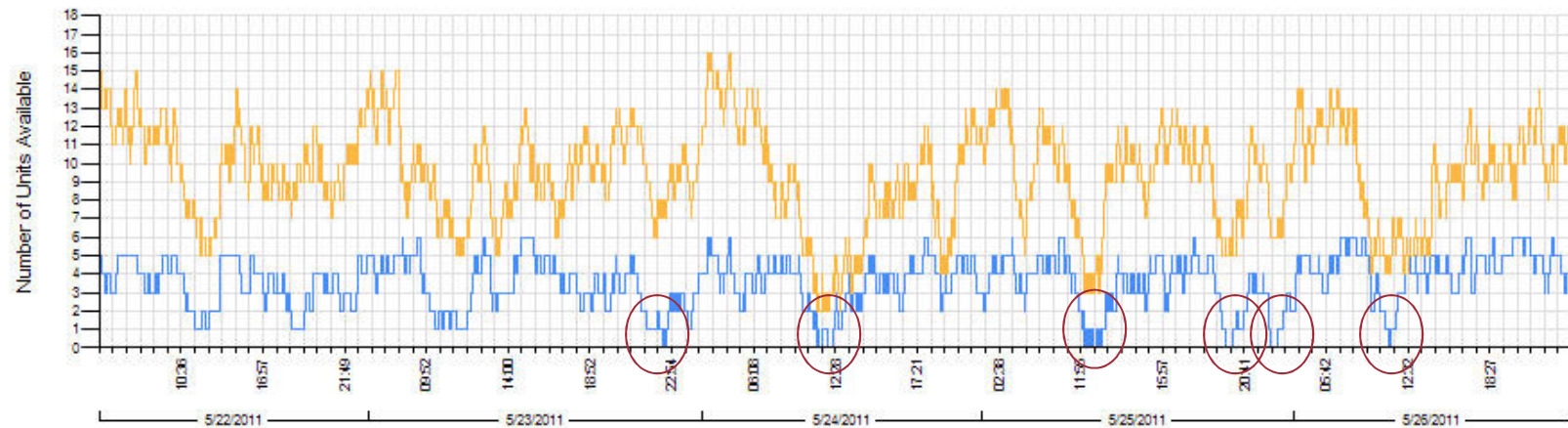


High Rises without Sprinklers

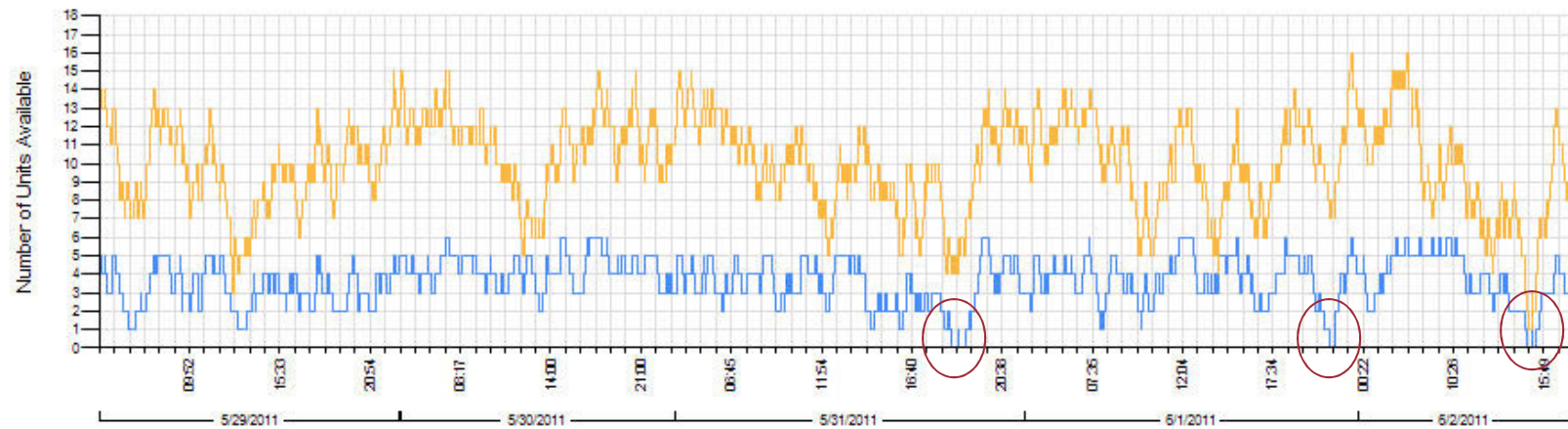
## Challenge: EMS Calls on Rise

- Approximately 68% of all Calls are EMS-Related
- Currently Operate:
  - Five (5) Round-the-Clock Units: 24/7/365
  - One (1) Peak-Time Unit: 7/365
- Medic Units are not always Available:
  - Example: June 2, 2011. 3:00 PM.
  - No Medic Unit Available
- For Region-Wide Emergencies, Aid Calls Rely on Support Beyond our Neighboring Jurisdictions.
  - Example: In the past year, have received 7 Medic Unit Responses from Mount Vernon

EMS Units Availability #1



EMS Units Availability #2



Number of Alexandria Units and 10 closest Units from Other Jurisdictions Available by Date and Time